

REMARKS

The newly amended range recited by claims 1 and 7 is found in [0053] of the substitute specification.

The rejection of claims 1, 2, 5, 6, 8-11, 15 and 27-29 for anticipation by Saitou et al (US 2003/0180520) is traversed. The Examiner at page 3 of the final action noted:

“... the inorganic particles as a matting agent is contained in an amount of not less than 2 parts by weight and not more than 20 parts by weight based on 100 parts by weight of the hard-coat agent (paragraph 0011).”

However, the Examiner does not explain how claim 2, which recites a range of 0.1 – 1.0 Wt %, based on the solids content of the anti-Newton ring layer, could be anticipated by such a teaching. In other words, the Examiner has not stated a *prima facie* case for anticipation of claim 2.

As noted above, claims 1 and 7 have now been amended to recite the slightly broader range of 0.1 – 1.5 wt% taught at [0053] of the substitute specification, which range is also significantly below the lower limit of $2/(2 + 100) = 0.196$ wt% taught by Saitou et al. Saitou et al teach, in [0033], that the matting agent should be present in the amount of at least 2 parts by weight, preferably 20 parts by weight, per 100 parts of the HbHC agent (ionizing radiation curable organic-inorganic hybrid hard-coat agent – see [0017]) to provide “sufficient anti-glare property.” In contrast, the present applicants teach ([0053] of the substitute specification) that an amount of the “fine particles” greater than 1.5 wt% reduces the transparency and generates “sparkles”. As explained at [0004] of the substitute specification, sparkles are “luminescent points” which produce glare on the color screen. As further taught

at [0005] of the substitute specification, an object of the present invention is to provide a good anti-Newton effect without generating sparkles.

This difference in the requirements for different physical properties derives from the difference in functions as between a hard coat film (Saitou et al) and an anti-Newton ring sheet (the present invention). Specifically, a hard sheet coat film is provided as an outermost layer of a sheet to make the sheet mar-resistant and should contain not less than 2 parts by weight of the matting agent in order to obtain anti-glare property for optical applications. On the other hand, the anti-Newton ring sheet is provided to prevent adhesion of two sheets and should not generate sparkles while providing a good anti-Newton ring effect.

The Rejection of Claims 7 and 17-26

The rejection of claim 7 and the claims dependent thereon (claims 17-26) for obviousness over Nigami in view of Kimura et al is respectfully traversed.

As explained in [0004] of the substitute specification, one problem in the prior art is that the particles contained in an anti-Newton ring sheet act as luminescent points, causing a phenomenon called "sparkles". As further explained in [0051] of applicants' specification, in one aspect of the invention, applicants purposedly provide a relatively high degree of variation in size of the included particles, i.e. above the recited minimum of 30%, to minimize the "sparkles" phenomenon.

More specifically, at [0022], applicants teach that the problem of "sparkles" in an anti-Newton ring layer is solved by the present invention in each of embodiments (1-3). Claim 7 is directed to the third (3) type embodiment, i.e., combining a radiation curable resin with specific fine particles. The third type embodiment is described in [0052] as follows:

“In particular, the fine particles having a mean diameter of 0.5 μm - 3.0 μm and a coefficient of variation of the particle diameter distribution of 20 - 80 % are used, the above-mentioned effect to suppress the generation of sparkles is obtained even if general ionizing radiation curable resin compound is used alone.”

In contradistinction, Nagami does not mention “sparkles” and is totally unconcerned with that phenomenon. Further, Nagami “teaches away” from the invention as defined by claim 7 in that Nagami expressly teaches [0019] that the invention disclosed and claimed therein requires “particles of approximately the same size ... that is, particles having a narrow particle diameter distribution” and that the coefficient of variation of the particle diameter distribution “should be not more than 25%, preferably not more than 20%still more preferably not more than 10%.” The citation of Kimura et al does not negate the fact that Nagami expressly teaches away from the allegedly obvious modification and, for this reason, Nagami does not support a *prima facie* case for obviousness of claim 7 and the claims dependent thereon.

The hypothetical modification of Nagami is not *prima facie* obvious also for the reason that the essential feature of the invention of Nagami is use of a “particular type of particles in the anti-Newton ring layer”:

[0007] “The inventors of the present invention conducted diligent studies on materials, shapes, diameters and so forth of particles included in anti-Newton ring layers and, as a result, found that the above-mentioned problems can be solved by using a particular type of particles in the anti-Newton ring layer. Thus, the present invention was accomplished.” [Emphasis added]

In the immediately following paragraph [0008] Nagami teaches that the particular type of particle referred to above is in the form of “monodisperse spherical particles having a mean particle diameter of not less than”

Thus, the allegedly obvious modification of Nagami would change the principle of operation of Nagami and, therefore cannot properly be considered *prima facie* obvious. See *In re Ratti*, 123 USPQ 349 (CCPA 1959) and MPEP §2143.01.VI.

In contradistinction, the present invention intentionally avoids use of monodisperse spherical particles. In [0051] of the substitute specification applicants teach:

“Unlike monodisperse spherical particles having a uniform particle diameter, the fine particles with a coefficient of variation of the particle diameter distribution of 20% or more prevents uniform scattering of light of the displayed image on the surface of an anti-Newton ring layer, and suppresses the generation of sparkles effectively. The fine particles having a coefficient of variation of the particle diameter distribution of 80% or lower can maintain transparency and further suppress the generation of sparkles since the fine particles which increase scattering of light of a displayed image can be excluded.”

Yet another reason why it would not have been obvious to modify Nagami in view of Kimura et al, is that Kimura et al is directed to a light diffusion sheet whereas Nagami is directed to an anti-Newton ring sheet. All of a hard coat film (Saitou et al), an anti-Newton ring sheet (Nagami) and a light diffusion sheet (Kimura et al) have different functions and, consistent with those different functions, require different physical characteristics.

The Kimura et al reference discloses the resin particles contained in a light diffusion layer and such a teaching is considered irrelevant to fine particles contained in an anti-Newton ring layer. In the Kimura et al reference, the resin particles within such a coefficient variation range are used in order to obtain balanced distinctness of transmission image and haze (paragraph 0032). In the anti-Newton ring sheet, the fine particles are included in the anti-Newton ring layer in order to prevent adhesion of the sheet to another sheet and have no relation to the distinctness of the

transmitted image. Accordingly, there is no reason to modify the anti-Newton ring sheet of Nagami by employing the particles of the light diffusion layer of Kimura et al.

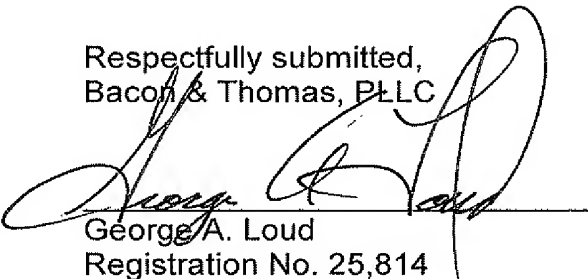
It should be also noted that, although the Nagami reference teaches that the anti-Newton ring sheet is used as an optical sheet, such as a light diffusing sheet, a light diffusing layer is distinct from the anti-Newton ring layer and is provided on the opposite side of the anti-Newton ring layer (paragraph 0025).

Further, whereas Nagami uses modisperse spherical particles (the coefficient variation of 25% or lower) in order to prevent scratching of a light guide. On the other hand, the invention uses fine particles of relatively wide particle diameter distribution in order to prevent generation of sparkles. In the present invention, the problem of generation of sparkles is solved by using fine particles of such diameter distribution together with ionizing radiation curable resin.

In conclusion, it is respectfully requested that the Examiner reconsider and withdraw the rejections.

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